history, and the presence of other abnormal scars. In the history of past recurrences, whether the process is a keloid, or a hyperthrophic scar, the cosmetic and etiologic implications related to its site should be taken into account. These scars represent formidable surgical problems.

In our clinic a study was made of the results of treatment of 149 raised scars by one or another of three methods: (1) simple excision alone, (2) excision followed by radiation—900 to 1800 rads in three to six doses at the excision site soon after operation, and (3) excision preceded and followed by local steroid injection, combined with radiation.

Of 104 raised scars in caucasians, the success rate was 28.5 percent when excision alone was used; however, when excision and radiation were used the success rate was appreciably higher (58 percent). In a total of 39 black patients, only one successful treatment response was observed with excision alone, whereas 50 percent success was noted with excision and radiation combined. In a total of six orientals there were no successes using excision alone, whereas excision and radiation was successful in 50 percent. In the series using the combined treatment (steroids, excision, and radiation) the success rate was 60 percent plus.

These statistics support the use of combined radiation and surgical excision with local steroid therapy in the treatment of raised scars.

There is no evidence to suggest that wide excision of raised scars helps to prevent recurrence.

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Immediate Reconstruction After Radical Cancer Operations on the Head and Neck

Radical operation on the head and neck for extirpation of cancer causes severe deformity and also interferes with the physiological functions of the upper airway and digestive systems.

The basic principle for such operation is the en bloc resection of all involved tissue, provided there are no distant metastatic lesions. Spread beyond the cervical lymph nodes usually occurs late in most forms of this disease.

Immediate reconstruction involves the skillful use of pedicle flaps, skin grafts and prosthesis in order to restore form and function. Furthermore, it enables the surgeon to extend his margins to greater anatomical limits and thus reduce the risk of local recurrence.

The advantages of a pedicle flap over a skin graft for reconstruction are: (1) the transfer of blood supply and subcutaneous tissue from a distance, making it less liable to fibrosis and contracture and to the effects of previous irradiation; (2) the ability to fill in large defects; (3) the covering of an exposed carotid artery to prevent rupture; (4) the transferred skin, permitting further radiation to underlying tumor; and (5) resurfacing areas with radionecrotic ulceration.

Modern surgical procedures have reduced the number of stages required for reconstructions.

Bakamjian of Roswell Park has introduced the most versatile of pedicle flaps, the medial-based delto-pectoral with its blood supply from the anterior branches of the internal mammary vessels. This flap, with its proximal carrier portion tubed, can reach to the zygomatic arch or the eustachian tube to line the cheek or oropharynx. The hypopharynx and cervical esophagus can also be reconstructed in a two stage operation with this flap.

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Nasal Ethmoidal Fractures

The standard treatment for fractures of the nasal-ethmoidal complex has been by transnasal wires held in place by metal plates. This has resulted in secondary telecanthus in a significant number of cases. Other complications of the

plates have resulted in pronounced scarring of the skin over nasal bones.

Clinical recognition by measuring the intercanthal distance and early open surgical reduction by wiring of the fragments either to themselves or to the stable frontal bone has resulted in a decided improvement in acceptable facial appearance. If the medial canthal ligaments are detached, they must be separately resutured to their bony attachments before interosseous fixation if the desired correction is to be achieved. A big factor in good correction is prompt diagnosis.

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Dissociative Anesthesia

Dissociative anesthesia is a different type of anesthetic state characterized by pronounced, analgesia, amnesia and catalepsy which is brought about by intravenous or intramuscular administration of ketamine (Ketaject® or Ketalar®). With appropriate doses, operating conditions can be produced without respiratory or circulatory depression. Pharyngeal and laryngeal reflexes tend to remain active and a patent airway is maintained even during surgical anesthesia. Duration of anesthetic action is brief, being 10 to 15 minutes for intravenous and 20 to 30 minutes for intramuscular doses. Disadvantages are (1) pronounced elevation of blood pressure in about 10 percent of adults, (2) aimless movements during anesthesia, and (3) dream states for an hour or so after anesthesia. Dissociative anesthesia has been found especially useful for frequent extensive wound dressings such as for burns, for operations during which use of an artificial airway is contraindicated and for short procedures in children who do not seem to be disturbed by the post-anesthetic dream state.

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